

Percent Equation

Use an equation to find an
EXACT answer.

I wonder how I change
a sentence into
an equation. . .



Edit

Reset

Finding EXACT answers using equations

?

1

Change the % into a decimal

2

of means ^{to} multiply AND is means equals

3

Assign a variable to the unknown.

4

Solve the equation.

5

NOTE: If solving for the percent, multiply final answer by 100.

Examples:

1) What number is 15% of 456?

$$\begin{array}{rcl}
 X & = & 0.15 \cdot 456 \\
 X & = & 68.4
 \end{array}$$

2) 133 is 85% of what number?

$$\begin{array}{r|l}
 133 & 0.85 \cdot r \\
 \hline
 0.85 & 0.85 \\
 156.47 & r
 \end{array}$$

3) 43 is what percent of 65?

$$\frac{43}{65} = \frac{X \cdot 65}{65}$$

~~0.66~~
66.15% = X

4) Find 14% of 166.

$$X = 0.14 \cdot 166$$

$$X = 23.24$$

Independent practice time ...

5) 27 is 13% of what number?

$$27 = 0.13 \cdot X$$

$$\frac{27}{0.13} = \frac{0.13 \cdot X}{0.13}$$

$$207.69 = X$$

$$X = 207.69$$

6) 87 is what percent of 111?

$$\frac{87}{111} = \frac{?}{100}$$

$$78.3783784$$

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HOMEWORK

TAKE OUT YOUR PLANNER